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ORIGINAL AND SELECTED ARTICLES.

CONVERSATIONS UPON THE PHYSICAL AND MENTAL HYGIENE OF GIRLHOOD.

BY T. S. POWELL, M. D.,

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CONVERSATION III.

Mother—"Doctor, good morning. I am glad to see you. Mary is still improving, under your treatment, but I have, since I saw you last, noticed a symptom about her health that gave me a little anxiety."

Doctor—"What is that, madam? Nothing serious, I hope."

Mother—"No, I trust not; but she frequently, after breakfast and supper, complains of palpitation of the heart—at least its pulsation seems quicker than usual, and not altogether regular."

Doctor—"What does your daughter usually eat and drink at breakfast and supper?"

Mother—"Well, usually, bread and butter, eggs, grits, and some kind of sweetmeats, and drinks coffee at both meals. She is very fond of coffee, and likes it rather hot and strong."

Doctor—"The coffee is, no doubt, the cause of the palpitation of her heart. I have observed your daughter is of an excitable temperament, and the ill health she has had for some time has, of course,

weakened her nervous system greatly. She ought not to drink coffee, unless it is half milk, and then only at breakfast."

Mother—"All our family are very fond of tea and coffee. Do you think neither of them is a wholesome beverage?"

Doctor—"Well madam, that greatly depends upon the condition, temperament and mode of life of the parties who use it as a beverage; and if tea, whether it is black or green. Both have narcotic and astringent principles. The green tea contains more than the black, and affects more powerfully the nervous system; also, in so many ways, that it is rather an unpopular and unprofitable subject to discuss. For instance, there are some persons who are exhilerated and refreshed by a cup of good tea, either green or black, but it will affect others in an opposite manner, producing great depression, with a variety of nervous symptoms. There is still another class of persons who are not benefitted by the use of tea—I mean those who suffer from indigestion in any form. Hence, there is no beverage of which a greater variety of opinions have been expressed."

Mother.—"Yes, I have heard various opinions advanced about tea as a drink, but none of them seemed satisfactory."

Doctor—"Some writers regard tea as a poison; others recommend it as a valuable stimulant, and go so far as to say that it assists the digestive organs in their office. I think all these opinions are true, if applied with discrimination to the classes of persons I have mentioned. If taken in moderate quantity, at a moderate temperature, and at proper times, unpleasant effects are seldom produced.

It is certainly injurious to drink of tea copiously during meals or soon after. Some think that in such quantity it interferes with digestion by diluting the gastric juice, distending the stomach, and retarding chymification on account of its narcotic and astringent principles. It is evident that if the stomach is greatly distended with a fluid of any kind, it will be more difficult for the solids to be digested; but as to the fluid diluting the gastric juice, I am not fully prepared to endorse this opinion, because the gastric juice is not very soluble in water. At the same time it is true that this important element in the process of digestion cannot act upon solid food when too much fluid has been taken into the stomach. On the other hand, if the solid food is of a dry, hard nature, the fluid must be sufficiently copious to soften its solidity, or digestion will be equally if not more impeded. Therefore, different kinds of food require an intelligent discrimination as to the quantity of fluid to be taken while eating, so as to perfect chymification or digestion. Now, madam, a few words on the subject of coffee."

Mother—"Before you give me your opinion upon coffee, please tell

me what kind of food requires more or less fluid to promote the proper digestive action, and at what times should it be taken."

Doctor—"I do not know that I can answer these questions conclusively, as hygienists differ upon the subject. Besides, their various opinions would probably be of no especial benefit to you, and it would consume so much time to enumerate them that I fear it would tax your patience."

Mother—"No, indeed, Doctor. I would listen attentively, and try to understand. I am very much interested in the subject."

Doctor—"I think you are, madam, and I see you have one beautiful and profitable accomplishment, not possessed by all of your sex—that of being a charming listener—an accomplishment as much needed in the discussion of these plain but important questions as in the most brilliant topics of the drawing-room. In my preceding remarks I stated that food of a dry or hard consistency required more liquid than vegetables, as most of the latter have but little solidity after being prepared for the table. You know that more or less liquid is also required in cooking different articles of food, as baked meats must have more liquid in preparation than if roasted, and boiled meats must have more than either. As to the best time for taking liquids, I have also partially answered, but will be more explicit by saying that too much liquid drank just before, just after or during meals, will certainly interfere with the stomach in properly performing its natural functions; but if the nature of the food requires it, a small amount of liquid really assists digestion. There is but little food ever eaten that is so dry as to call for more than merely sipping the tea or coffee, or whatever fluid is used. It is gulping down many cups or glasses of the beverage that does the harm."

Mother—"Yes, I know that is true, and as an illustration, I used to think that I could not eat fresh fish, mackerel, etc., because it made me so very thirsty it seems I could not help drinking water until I was threatened with congestion of the bowels, and felt miserably for hours after eating. Some one then told me if I would control my thirst and drink no water at all for three or four hours after eating fish, I would find that it was the copious drinking of water that made me sick, and not the fish. I tried it, and found it true to my great gratification, and not only in regard to fish, but other dishes, and all fresh or salted meats."

Doctor—"Certainly, madam, because, as I have said, food, especially meats, cannot be well or quickly digested when floating in a large quantity of water or other liquid in the stomach. I know a lady who ate moderately of fried fresh fish one day at dinner. During the afternoon she drank, I suppose, more than a quart of cold water, and

about 6 o'clock that evening she was taken with congestion of the bowels, and came very near dying. Now, every one in shameful ignorance of the laws of health, would say it was the fish that made her sick, when, in reality, it was the large quantity of water she had drank. The fish was fresh from the river, delightfully cooked, delicious and wholesome in every respect, but it had to bear the responsibility of the attack of almost fatal illness. The proper time to take liquids is between meals, but not in these copious quantities. The only time when it is best to drink anything soon after eating, is when frozen fruits or ice-cream have been eaten at the table, as at dessert, for instance. Then a very small cup of coffee or tea pleasantly hot, can be taken with benefit, because it neutralizes the chilling effects of the iced viands. Digestion cannot be brought about perfectly when the stomach is either chilled by frozen articles of food, or unnaturally heated by those eaten almost scalding hot. Later after eating, water may be drank moderately without any injury, and indeed is then often necessary for the re-supply of our fluids as the chyle is being assimilated, and entering the blood to undergo its last change, and a certain quantity of liquid is now needed to complete its operations, and carry off the unnutritious matter."

Mother—"Do you think tea is more wholesome than coffee?"

Doctor—"Coffee is the more stimulating, but like tea, has dissimilar effects upon the nervous system of different persons. In some instances it prevents sleep, and in dyspeptics frequently produces acidity of the stomach, but with most persons a small cup of coffee taken at meals does not disturb digestion as tea is often found to do, but really increases and quickens the forces of the stomach, and enables some dyspeptics to digest articles of food that without it would have given great distress. When taken in such cases, for this purpose, it is best to have the coffee made by infusion or boiling, so that much of the aroma may be thrown off before drinking. If agreeable to the taste, a little sugar may be used, as this does not change the properties of the coffee, but milk weakens the effects and should not be used when the drink is taken as a promoter of digestion."

Mother—"But if the milk lessens the stimulating effects of the coffee, it is better for nervous people to use it in that way, is it not?"

Doctor—"Decidedly, and if they have a distaste for the milk, and the coffee is a strong infusion, it should be diluted with hot water or what is better, beat the yolk of a fresh egg in the cup, add the sugar, then stir in the coffee. A cup of tea or coffee prepared in the latter manner is very nourishing, especially suited to invalids, and all nervous persons who use coffee or tea, as the addition of the egg seems to lessen the stimulating properties of these beverages. It also gives it a rich and pleasant flavor, and is preferable to cream or milk."

Mother—"If tea nor coffee is good for our children, I am satisfied they have been a great injury to many. Would it be better to give them chocolate or cocoa?"

Doctor—"I know but little of them experimentally, as I have never been fashionable enough to use either; but in my judgment both are injurious as a beverage. They contain so much nutritive matter, they should be considered more as a food than a drink. Chocolate has a much larger amount than cocoa, and is also adulterated with various articles which make it more liable to disagree with the stomach, and often produces more or less nervous excitation. It also contains an oil which is so difficult to assimilate, that it furnishes but little nourishment to the system, and that little at great expense to the functions of the stomach. Cocoa contains less oil, and less nutrition, and is therefore not so objectionable as a beverage, nor so apt to interfere with digestion, but neither should be used by children or invalids. But madam, I must go now. Mrs. ———, who has been expecting me for two hours, will give me—well, you know how she can bless a fellow."

Mother—"Never mind about Mrs. ———, she is a good woman if she does sometimes get into a pet, and say ugly words. If tea, chocolate nor coffee is good for children, do tell me what should I give mine to drink."

Doctor—"There is one kind of tea that is good for them, madam, and is also really delicious when properly prepared. It is an old fashioned drink, and what our mothers and grand-mothers called 'kettle tea.' It is made by putting the teacup one-third full of fresh, rich sweet milk, then poor in water *boiling* hot until the cup is full, add as much white sugar as is desired, and if the milk is *pure* as well as fresh and sweet, you now have a wholesome drink, and one that all children will think delicious."

Mother—"Oh, yes, I have often prepared that kind of tea for my babies, but thought it only suited to children *as* babies."

Doctor—"It is suitable for them at any age, my dear madam, even after they become men and women, and I have known not only rosey, cheeked girls, but great rollicking boys, who had been accustomed to this drink all their lives, to actually cry for it if it was missing at the time. They usually took it with their food. These careful and intelligent mothers had never allowed their tender stomachs to be disordered by coffee and green and black tea, and their nervous system to become morbidly excited by the stimulating effects of either, consequently their taste for drinks was not perverted and manifested by a craving for artificial stimulants, but they only desired their natural and wholesome beverage—pure milk and water. I am satisfied that table

teas and coffee are highly stimulating drinks, and are not only injurious to children's health at any age, but also causes them to be restless in their sleep, and more cross and excitable when awake than they would be under other circumstances."

Mother—"Then you advise me to give my children the 'kettle tea."

Doctor—"Yes, madam, you and all mothers. In the winter season, give them 'kettle tea' at breakfast and supper, and sweet milk alone at dinner. During the warm months let them also have 'kettle tea' at breakfast, and fresh butter milk at dinner and supper. If the milk cannot be procured I would advise all mothers to give their children only cold water."

Mother—"Since you have mentioned this, Doctor, I remember how I have been surprised and grieved to see my children often so nervous and irritable, when otherwise they seemed to have very amiable dispositions. I shall certainly make this change in their diet at once, but as they have used a great deal of coffee and both black and green teas, I expect they will rebel at being deprived of the stimulants."

Doctor—"They may for awhile, but persevere in it; tell your children kindly but firmly, why such drinks are not good for them, and I am certain they will soon become fond of the kettle-tea. I have frequently observed that when children were physically in a normal healthful condition, their instincts in the choice of the most wholesome food was greater than is shown by grown up people."

Mother—"I have often noticed that in children myself, and wondered why it was so. I now see that it is instinct. I see, Doctor, you are getting impatient and anxious to go, but I have a few more questions to ask you, which I know you will answer. Do tell me what you think of wines and all spirituous liquors as a beverage, and as a medicine or tonic?"

Doctor—"I do not think that the moderate use of pure wines and liquors, taken at the proper time, is positively injurious to adults. Sometimes a small quantity of pure wine, brandy or whisky, taken daily by persons advanced in age, say sixty years, is of real benefit in gently toning up the waning powers and strength consequent upon that stage of existence. Even then, it is not really necessary if old people are in perfect health, and have been accustomed to an active out-door life. The quantity of teas and coffee that most old people indulge in is generally sufficient without any drink more stimulating. To younger persons and infants in perfect health, spirituous liquors are certainly an injury in every instance. Where they are really needed by persons in ill-health, I consider it a medicine, not as a beverage. But in some cases where it is used as a medicine, it is not needed as such if those

who use it would change their mode of living. This is true of many persons who are considered healthy, who have no positive disease as yet, but there is some little disorder, some diversion from perfect health, caused by living up to the requirements of society, and they now feel it is necessary to use a little stimulant to keep up the usual strength to meet the demands of a life that is continually exhausting the physical powers. But like all artificial strength, it is only temporary, and the person is more feeble than before, and more depressed in spirits as soon as the stimulant is withdrawn."

Mother—"Yes, I know that is always the result when liquors are used as a stimulant by ladies of society. But are they not good as dyspeptic tonics?"

Doctor—"They are of some benefit in a few instances of atonic dyspepsia, but the good that they do in that form of dyspepsia has been much exaggerated, and has caused them to be used in irritable and inflammatory cases, and which greatly aggravated the symptoms. So, where one person in ill-health has been benefitted by the stimulants, others have been damaged."

Mother—"Do all pure wines contain alcohol?"

Doctor—"Yes, the stimulating and intoxicating element of all spirituous liquors is alcohol. Some contain more than others, and affect the system according to its combinations and conditions. For instance, the same amount of alcohol taken in the form of pure wine or greatly diluted with water—especially if it has been mixed for some hours before drinking—affects the system very differently, as regards intoxication, than if it was drank in the form of whisky or brandy. This is because alcohol contained in wine is more readily blended with water than when it is mixed with other ingredients, and therefore, it does not intoxicate as it would if drank without this preparation. This proves the truth of every man's experience, that the same wine affects the same man differently at different times, according to the state of the stomach when the wine is taken."

Mother—"Do you think, Doctor, that beer and ale are unwholesome, as beverages?"

Doctor—"Well, madam, it can be said of all malt liquors, as others, that sometimes they are of a little benefit to the person who uses them in moderation, while they have proved of great injury to others. They are unlike wines in many respects: first, they contain a peculiar bitter and narcotic property which they receive from the hops used in their manufacture; they contain less spirituous and more nutritive matter, and we find that those persons who use these drinks freely are generally fat, and in many cases when these are immoderately taken with a strong course of diet, if the persons do not habitually exercise to a

great extent, they soon find themselves in a plethoric condition, the secretions, to a great extent, arrested and vitiated, thus producing disorders and diseases. This explains why malt liquors are not as injurious to the health of the poor and the laboring classes as to the rich, because the latter take less exercise in doors and out, and at the same time live luxuriously. The amount of nutritive matter contained in beer or ale, is not very easily digested, and when taken in connection with the variety of rich food commonly found on the table of the wealthy classes, serious damage to health is almost sure to eventually follow."

Mother—"I see one must use discrimination upon these points to determine when these drinks are injurious."

Doctor—"Yes, madam, one must understand and observe these points, and many others in regard to the subject, or a large majority of the sick, and those who are not, yet habitually use malt liquors, will sooner or later become diseased, and fatally so in many cases. Ah, good morning, Miss Mary; I am glad you have come in before I left. You are still improving, I hope."

Patient—"I believe I am almost well. I can work, eat and sleep so much better."

Doctor—"Yes, it is very evident that health is returning, and much faster than I at first anticipated; and, my dear madam, I must say that it is owing, in a great degree, to your intelligent watchfulness in enforcing obedience to my prescriptions and the proper hygienic measures for the restoration of your daughter's health. I thank you for your co-operation, and if all parents would thus assist the attending physician, "the Doctors" would not so often be charged with failure in having done their whole duty."

Mother—"Yes, Doctor, that is true, for, while I know there are quacks among many so-called "Doctors," I am sure that persons very often, even when they have the best of physicians, expect more of him than he can really perform. I know "the Doctor" cannot cure any one who is sick, unless the patient has intelligent and careful nursing and follows directions implicitly."

Doctor—"And, yet, madam, we have so few really good nurses—those who are conscientiously faithful, and have a full and intelligent knowledge of the important position."

Mother—"Yes, very few, indeed. I sometimes think that no woman or young girl ought to be considered accomplished unless she has had a good training in this department."

Doctor—"Her home accomplishments are certainly deficient without this very desirable one; and if you can get the ladies to look upon the proper nursing of a sick person as an accomplishment, they will

probably devote a part of the time to its acquisition, that they now spend in weeping over the sham sorrows of heroines in dime novels, or on the stage. But, Miss Mary, though you have greatly improved in every respect, yet you are not quite well, and I want you to get ready and go to your uncle's in the country. The summer months will begin in a few days."

Patient—"Well, Doctor, I can go at any time, will start to-morrow, if you say so."

Doctor—"Very well, pack your trunk at once. I want to get you where you can romp and play under the trees, eat good, fresh food, and drink pure spring water."

Mother—"I am glad you mentioned water, Doctor. I have been wishing to ask your opinions about the different kinds. We have lived where we were compelled to use a variety of waters, spring, well, rain, river, lake and even marsh water."

Doctor—"Water is certainly God's beverage for man, but its quality and healthfulness depends upon the source from which it is derived. Water that contains a large amount of earthy matter is without doubt a great source of certain diseases. It is still more unwholesome when it has in solution putrescent animal or vegetable matter, or is strongly impregnated with certain minerals. It is for the first-mentioned reason that some water is wholesome one year and the next is the cause of disease."

Mother—"Mary, you can go now, if you wish, as you do not seem to be interested in our conversation."

Doctor—"Yes, madam, I think your daughter takes an interest in our talk, at least she ought to be interested more, perhaps, than yourself. The popular idea that mothers should not have their daughters learn from the proper sources everything that is necessary to preserve their health in a perfect condition, has destroyed many promising young lives, and made desolate many a mother's heart. All these things can be taught by the mother in an earnest, impressive, and yet confidential and delicate manner, so as not to offend the modesty of the most chastely-nurtured young girl, nor intimidate her confidence in seeking and obeying her mother's counsels whenever it is necessary."

Mother—"Yes, Doctor, I know I had fallen into that popular idea to a great extent myself, and as I now feel, much to my regret, for since my talk with you on these subjects, I can see more fully how remiss I have been in this important duty."

Doctor—"But I am sure, my dear madam, that you will not be so in the future. Conviction is the first step towards action. But, let us return to the subject of water. Rain water, if caught in the open field, is the purest of all water, but when caught in large pits it is im-

pregnated with impurities from the smoky and impure atmosphere through which it passes, and very often becomes contaminated with calcareous matter which makes it necessary to boil and strain the water before it is fit for use. On the whole, spring water is perhaps the purest for domestic or medicinal purposes, especially when the springs are large and run out of silicious rocks or beds of gravel—in either case the water is less impregnated with impurities, and the minerals that are not conducive to health. This is pure soft water. Even horses often become diseased from being compelled to drink hard water all the time. As pure water is so essential to health and long life, no expense should be spared to obtain it. When you first procure it, well water is the same as that from a spring, either soft or hard, according to the subsoil or geological formations through which it passes; but well water is more likely to become impure from infiltration, as the least trace of filth from a cess-pool or drain may, and often does, convert well water into a slow poison, producing disease and death."

Mother—"Doctor, how are we to determine that the water is thus contaminated? Does it affect the color or taste?"

Doctor—"No, madam, very often water thus polluted is pleasant to the taste, it is clear and sparkling, and no danger is suspected until some serious disease breaks out in the family, and of a nature to create suspicion that filth is the cause. The recent investigations into the causes of cholera has confirmed the opinion that the drinking of impure water is, to a great extent, the basis of this dreaded and fatal disease. The diseases that are caused by the use of impure water are typhus fever, diphtheria, diarrhœa and dysentery. The only certain test of impure water is to submit it to chemical analysis."

Mother—"But, Doctor, why is it said that the water of old wells is pleasanter and purer than that of new?"

Doctor—"Because the unpleasant and unhealthy particles of matter found in nearly all new wells have been drawn off, and for the same reason, when a well or spring has a bold vein flowing all the time, the more water is used the better it becomes."

Mother—"Yes, I was aware of that, but I never knew the philosophy of it before."

Mother—"But, Doctor, how can we get pure drinking water in a city, especially, when we have such a miserable, inefficient system."

Doctor—"The next, and I believe the last water upon which you desire my opinion is the lake or marsh water. Both are entirely unfit for man or beast. But madam, my time is now out, and I must ask to be allowed to tell you the reason why this water is poisonous at my next visit, I must go, good morning. I will call this day week."

Mother—"I shall look for you. You must not disappoint me."

Doctor—"No madam, I will not. You may look for me with certainty, unless some unforeseen circumstance should intervene so as to prevent me. Punctuality in visiting patients, and fidelity in complying with engagements, I teach my students is very essential to inspire confidence on the part of the patient in his physician. Good morning."

[TO BE CONTINUED.]

OPERATION FOR STRICTURED HERNIA—PATIENT NINETY-TWO YEARS OLD.

BY T. H. CALDWELL, M. D., ROME, GA.

A case came under my observation a few weeks since, which will probably prove interesting to some of the profession, exemplifying, as it does, the remarkable recuperative power sometimes found in persons advanced in years. I was called in to see an old man ninety-two years of age who had an oblique inguinal hernia of twelve years standing.

Two days previous to my visit the gut had fallen. He tried to replace it, as he had done many times previous, but failed. Both my partner, Dr. T. J. Word, and myself, tried by taxis, to reduce the tumor; failing in this, we—using our needle from a hypodermic syringe as a trochar—let off the gas and succeeded in partially reducing it. Upon farther examination we found a commencing hydrocele, caused, probably, from the recent inflammation. We then introduced our needle into the sack and drew off a quantity of bloody serum. The patient was relieved, to a large extent, of his pain, and we left him for the night.

When I called the next day, the gut had refilled with gas and forced itself down once more. I then called in consultation Dr. T. J. Word and Dr. J. B. S. Holmes, to consider the advisability of an operation.

Would the age and condition of the patient justify it? As he was, he would surely die within twenty-four hours; but would he survive the operation? We decided to state the case frankly to him and let him decide for himself. This we did. He immediately consented for me to operate. I did so in the usual manner. Upon reaching the seat of the stricture, I discovered the cause of our failure to reduce the tumor after emptying the gut of the gas; there were several very firm adhesions around the ring, and when I broke these up the gut slipped back without any difficulty. The wound healed by first intention. His bowels were moved at the end of six days. The patient has now a good appetite, and is going about as usual.

Taking into consideration the age, the condition of the patient, together with the fact that the intestine had been down for five days previous to the operation, I think it is the most remarkable case of its kind on record.

ALCOHOLIC MANIA IN CONNECTION WITH ACUTE DISEASE.

[Read by Dr. J. B. Ayer before the Boston Medico-Psychological Society.

According to Dr. Greenfield, the translator of Magnan's work on Alcoholism, there are few medical subjects upon which less has been written than upon acute and chronic alcoholism. The very frequency of the alcoholic element in disease has caused the subject to be neglected.

Verneuil's paper upon the Prognosis of Injuries and Surgical Operations in Drunkards, awakened much interest among the profession. He stated that the deplorable state of the system engendered by alcohol was as important a cause of failure in surgery as exposure to morbid germs. He proved that habitual drinkers who had previously never seemed the worse for liquor, often developed the most serious complications, after receiving insignificant wounds.

He urged that alcoholism, as it so frequently complicates disease, should be studied by the physician no less than by the surgeon.

According to Magnan the habitual drinker ceases to enjoy immunity as soon as the physiological equilibrium is destroyed by the blow of an intercurrent disease.

The following is a summary of a case cited in illustration :

The patient, fifty-one years of age, had, for the past thirty years, stimulated freely without apparent injury to himself, as he always seemed to enjoy the best of health.

The day following more than usual indulgence he was attacked with a catarrhal cold and severe lumbo-abdominal neuralgia. There was nothing unusual about the case until the sixth day, when the fever, pain, and jaundice having disappeared he suddenly developed hallucinations of sight and hearing, and became very suspicious. At first he said little regarding the hallucinations, but as they increased he began to mention them freely, and argued that the pigmies and insects which he saw, and the voices which he heard, were all real, and insinuated that those who did not agree with him were stupid folks.

Muscular tremor, copious perspiration, insomnia and loss of appetite were prominent symptoms.

On the third night after the disappearance of the catarrhal symptoms he was greatly excited, fighting with his imaginary foes. But when he was at the worst he would answer a question correctly, his mind instantly reverting, however, to the old delusions.

On the fourth day, after consultation with Dr. Jelly, it was decided that full treatment must be carried out. He was accordingly removed to another room. Four doses of chloral and bromide of potash were given at intervals of about an hour up to seventy grains of chloral and eighty-seven grains of bromide, by which time the patient was well under the influence of treatment. Strong beef tea and egg-nogg were insisted upon. This treatment was not carried out without a great deal of urging.

After a two hours' nap the patient awoke with fewer hallucinations. During the following twenty-four hours they gradually lost their hold

upon him, and he slept a great portion of the time without further sedative treatment.

He was given ferro-phosphorated elixir of calisaya, and the stimulant was gradually diminished to a little sherry wine and a glass of ale daily with his meals. Although he made a perfect recovery, it was over three weeks before he could give close attention to business without bringing on headache.

While the insomnia, trembling and free perspiration, in connection with the peculiarities of the hallucinations and the possibility of diverting the patient's attention from his delusions pointed strongly to the alcoholic character of the delirium, yet a *positive* diagnosis could not at first be made.

A case was cited, which had been under the reader's care, of a young lady recovering from an attack of peri-uterine cellulitis, who developed hallucinations about bugs, snakes, and Chinese pigmies, and in most respects resembled the previous case. The excitement, however, was not connected with alcoholism. She grew worse and was removed to the South Boston Lunatic Hospital, from which she was discharged well at the end of five months.

The reader advised caution in giving a prognosis in cases of alcoholism, agreeing with Lawson that "the intense furor accompanying alcoholic brain disorder may disappear under treatment in a single night, yet, under precisely the same appreciable conditions, the excitement in another case may continue for weeks, the delirium lasting as long as the deterioration of nutrition and the instability of nerve centres combine to maintain it."

Regarding treatment, bromide of potash and chloral, together with strong beef tea, broths, and (generally) egg-noggs, were advised. Balfour's treatment by forty grains of chloral every hour for three doses (for an adult), combined, if heart is feeble, with one half to one ounce of infusion of digitalis, was commended.

In the discussion which followed, Dr. Webber said that it seemed to him, from the account of the case given by the reader, that the patient was really suffering from delirium tremens, not that it was a case of mania induced by an acute disease in a person addicted to hard drinking. The fact that the patient had been a very hard drinker, and had taken nothing for four or five days, and then was attacked with tremor, sleeplessness, hallucinations of sight and hearing, the objects seen being such as were described, resembling those seen in delirium tremens, renders it probable that that was the disease. The acute disease may, perhaps, have been one element in causing the attack, though the abstinence from alcohol was probably the more influential.

In comparatively mild cases of delirium tremens chloride and bromide of potassium are certainly beneficial. Small doses of these drugs, however, do no good! twenty, thirty, and even forty grains of chloral with thirty to sixty grains of bromide of potassium are more likely to be efficacious in procuring sleep and restoring the patient to sound mind than the smaller doses of ten to fifteen grains, which are sometimes given. The larger doses may be repeated hourly if necessary: One disadvantage of small doses is that the patient seems to be more excited after taking them, and finally a larger quantity of medicine is required. In severe cases, where the pulse is rapid and feeble (120

or more), and where there is great excitement accompanied with hallucinations of sight and hearing, Dr. Webber stated that he had found digitalis the best remedy. He uses the tincture in very severe cases in doses of half an ounce, which may be repeated at the end of four hours if necessary. Many times one dose is sufficient to secure quiet; he has known patients who were greatly excited to fall asleep within half an hour after taking the drug. He would not advise the frequent repetition of these doses. In using digitalis it is all important to observe the pulse; where that is very rapid and feeble in uncomplicated cases large doses can be given; where the pulse is only moderately increased in frequency the larger doses are not called for, one or two drachms being sufficient. Where delirium tremens is complicated with other diseases which have either preceded the mania-a-potu or have occurred at the same time with it, as pneumonia or bronchitis following exposure while the patient was drunk, the treatment must be modified according to circumstances.

Delirium tremens usually occur in old topers or persons who have been addicted to the so-called moderate use, and have at length been on a spree of several days' or weeks' duration. Besides the ingestion of alcohol there is usually also abstinence from food, the patients declaring that they have eaten scarcely any food for one or two weeks, or even longer. There is also usually insomnia, for a longer or a shorter time, and these elements undoubtedly play a part in the delirium tremens.

He said that during the war, in the latter part of 1862, he was stationed on board the receiving-ship Ohio as assistant surgeon; many men were enlisted in the navy who were received on board partially intoxicated, or who had but lately been drinking heavily for a long time; in several instances these men were taken down with delirium tremens after some days of enforced abstinence on board ship. This would show that, contrary to the opinion of some, the sudden breaking off of drinking may be one factor in causing the disease. Most of the patients, however, who are received into the hospital continue to drink up to the time of the attack.

In regard to treatment where there is vomiting, the tincture of capsicum in doses of half a drachm or a drachm is of value, and may be given in combination with the chloral and bromide. After the severity of the atteck has passed off, while the patient is still weak and tremulous, three to five grains of quinine seems to be of use to restore the natural tone of the system.

Dr. George W. Gay then said, this affection is so common in the surgical department of this hospital that we are constantly on the watch for the tremulous tongue and hand, and any undue nervousness in our recent casualty cases. I have also noticed that the wounds of patients threatened with delirium tremens are sensitive out of all proportion to their severity.

Steady drinkers brought here on account of an injury are very apt to show signs of the horrors of delirium tremens, however slight the injury may be. The disease is usually developed in three days, sometimes longer; occasionally it terminates in chronic mania.

The most common treatment here is beef tea well seasoned with red pepper, given as freely as the patient can take it; chloral (fifteen

to twenty grains), bromide of potash ammonia (thirty to forty grains), every two or three hours; tincture digitalis in half-ounce doses where the heart is weak. I often preface the treatment with five grains of calomel and fifteen grains bicarbonate of soda. The great majority of cases recover.

Dr. Rowe referred to the well-known fact that patients who had previously received traumatic injuries to the head were peculiarly susceptible to much smaller quantities of alcohol than the ordinary patient. He cited within his knowledge several patients of this class at the Boston Lunatic Hospital who, by very moderate quantities of stimulants, had been made maniacal for varying periods. One case of delusional insanity, having a history of previous head injury, was made excited, sometimes requiring seclusion, by so mild a stimulant as new cider, sometimes served at the social parties given to patients.

Dr. Ray has written a monograph on this feature of brain disease, which can be found in his Contributions to Mental Pathology.

Dr. Rowe, while physician at the House of Correction at South Boston, had tried nearly all reputed remedies in alcoholismus, but found in the majority of cases that nothing served so well as moderately large doses of chloral and bromides. His experience with hyosciamine had been of no avail, but deemed the particular samples used by him as not true hyosciamine.

Dr. Bancroft: In reference to the ætiology of an attack of delirium tremens, two cases occurred under my observation at the City Hospital which seemed to show that the attack did not occur immediately after a prolonged spree, nor after the withdrawal of the daily quantum of liquor; but upon the indulgence in a single glass of whisky after a total abstinence of four or five days. The patients were doing well, but after partaking of four or five ounces of liquor surreptitiously introduced by their relatives, they immediately developed violent attacks of delirium tremens, of which one of them died.

Dr. Bancroft described the case of a young man aged twenty-five, who has recently died at the New Hampshire Insane Asylum. The facts, in brief, are these: in the year 1877 he suddenly shot a man, without having given much evidence of approaching mental disturbance at that time. Was committed to jail, and during his first day's residence there broke out into a wild mania. His insanity being unquestionable, he was at once sent to the asylum. From the date of his commital, May 24, 1877, until October 12, 1880, he did not utter a single intelligible, connected sentence. He was in almost constant motion, tearing his clothes, filthy in the extreme, and requiring the continuous attention of the attendant. The incoherency of his speech was simply indescribable; one thought had scarcely any connection with another.

For three years he remained in this state. On the 12th of October, after a period of unusually wild excitement, the attendant entered his room and bade him "Good morning;" the patient turned about suddenly and said: "I want to die. I feel ready to die. I have suffered for three long years, and I want to go where I can rest." These were literally the first intelligent words the patient had uttered for three years. He repeated these words a number of times during the next few hours. But he seemed gradually sinking. Occasionally he

rallied, and there seemed to be something on his mind that he wished to say. He did speak, among other things, of his wife and of trouble he had had with her, and his daughter, giving the name and age of the latter.

When the attendant went out of the patient's room the latter would call him back, and say there was something he wanted to tell him, but he did not seem able to express himself.

He gradually failed, and died the following day.—*Boston Medical and Surgical Journal.*

ATOMIZATION IN PULMONARY HEMORRHAGE.

BY WILLARD H. MORSE, M. D.

The question has been raised as to whether there is any real utility in the treatment of pulmonary hemorrhage by atomization. Although my experience has been quite limited, I desire to say a few words on this subject. The question admits of two antipodal answers. If the atomization be rightly conducted it is of excellent efficacy; if it be poorly conducted it is worse than useless. There are physicians fresh in their anatomy and positive in their prejudices who are not slow to assert that the treatment is without the least advantage, they arguing that foreign substances cannot pass the chink of the glottis without causing deleterious effects. Nevertheless, over and above a possibility of controversy the fact is undeniable that although medicated spray is of the nature of a foreign substance, it can and does pass the glottis, and instead of having any injurious effect, is beyond the shadow of a doubt of sterling utility in bringing about the end sought. Despite the contrary assertions physiological experiments have conclusively established the fact that minute quantities of the spray can enter the trachea. But I cannot believe that the efficiency of atomization depends entirely on the amount of spray that enters the glottis, but is due in no small part to the evidence of sympathy.

There are three medical agents that claim our attention as applicable in pulmonary hemorrhage—perchloride and subsulphate of iron, tannin, and alum. There may be other substances equally capable of atomization, and equally as applicable in controlling the hemorrhage, but they are untried, or if tried have been found wanting in the balance. The iron, tannin, and alum are alone proved to the truth. The most efficient of the three is the one first named. Tannin takes a second place, and scarcely less reliable is the alum solution. Much of the relative efficacy of the three depends upon the strength in which they are used. Of the ferric perchloride I consider a half-to-two-grain solution amply sufficient to meet the wants of any case. The tannin may be given from two to twenty-five grains, and the alum from ten to twenty. Although these are not the dispensatory doses, I think them better; but of course the dosage is to be governed by the case. Another essential, and one which I think has been overlooked and underestimated, has reference to the water of the solution. It will be found that if the menstruum be at a heat of 70° to 80° F. it will be less apt to irritate the lungs, and have more perfect "sympa-

thetic" action. It is also too frequently the case in the emergency of the disease to use any water that comes to the hand, provided it is not at boiling heat. Under such circumstances failure is not rare, whereas a uniform heat of 70° or 80° F., having no condition of irritation in temperature, is more conclusive to utility.

Another requisite to success in treatment relates to the amount of a given solution required to have a styptic effect. Considering that only a very minute quantity of the solution enters upon the affected broncho-pulmonary tract, it seems idle to inquire in this regard. Yet admitting that the primary effect of the action of the spray is extraneous by choice, it is well to fix some relative administration. The ferric solution should not be given without some definite intermission—five or ten minutes being necessary after a spraying of a half dram of the solution—that in that time the effect of the medicine may be noted. The tannin solution rarely requires to be used more than a minute at a time, six or eight such sprayings being amply sufficient in favorable cases.

Another requisite to success consists in the instrument used. I never employ the steam atomizer, as it is rarely if ever ready for use in such an emergency as pulmonary hemorrhage offers. Of the hand-ball atomizers I prefer the Delano instrument, and especialy the "No. 358," which is made with an extra long tube, and which is *par excellence* the best atomizer for atomization in diphtheria, catarrh, bronchitis, or any "throat disease" requiring nebulization, as well as in the pulmonary hemorrhage.

Mode of application of the spray is another essential. It is advisable to introduce the tube as far as the middle of the tongue and give it the proper downward direction, so that the force of the volume of spray a distance of an inch from the nozzle of the delivery-tube shall strike in front and across the epiglottis.

Another correlative rule of application is promptness of action. Delay is more than dangerous. Early attention determins all. There may be cases where any amount of atomization would be useless, but still local measures *may* do good, and it is always best to employ the atomization. Make no prejudicial choice of the agent to use, giving iron or tannin or alum, as it may be at hand, always remembering, however, that ferric solutions are of most merit.

If the precautions of which I have spoken be observed, atomization will be attended with success; but we should always bear in mind that it is like faith, utterly "dead" without the "works" of general therapeutical measures. A favorable formula of mine is—

Fluid. ext. ergot (Squibb's)	**℥ iij:**
Tinct. opii deodor	**aa ℥ ss.**
Fluid ext. ipecac	

M. Sig. Teaspoonful every half hour in connection with the use of atomization.—*Louisville Medical News.*

The Italian government is about to impose heavy duties on cotton-seed oil, to prevent its being used for the adulteration of olive oil, a practice which is fast ruining the Italian oil trade.

ABSTRACTS AND GLEANINGS

The Opium Habit.—Dr. C. W. Earle (Chicago Medical Review, November, 1880), writes as follows:

In these lectures on the opium habit, based on cases treated at the Washingtonian Home, and on inquiries made at fifty apothecaries' shops in Chicago, Dr. Earle states that, of 235 habitual opium-eaters, three-fourths were females, many of them prostitutes. Two thirds were Americans by birth. The larger number were between 30 and 40 years old, of the middle class, and either were or had been married. Most began its use for the relief of pain, under direction of a physician. The form of the drug used was morphine in 120 cases, gum opium in 50, tincture of opium in 30, unknown in 27, McMunn's elixir, paregoric and Dover's powder in the remaining 8. The quantity used varied from one-third of a grain of morphia, or equivalent, to 60 grains daily. A considerable number of persons not recognized as opium-eaters used the equivalent of from one third to one grain daily, and in the confirmed cases recorded, perhaps 15 per cent. of the subjects used from one to three grains daily, 15 per cent. used three to six grains, 30 per cent. used six to ten grains, 15 per cent. used ten to fifteen grains, 15 per cent. used fifteen to twenty grains, 7 per cent. used thirty grains, and 3 per cent. used sixty grains. Only four or five persons used the hypodermic method. Some took the drug in two or three daily doses, and some a large dose at intervals of from one to three days. The effects varied very greatly, some persons being stout and rosy, some thin and sallow; but, sooner or later, there were symptoms of disordered nutrition, enervation and moral degradation. Dr. Earle regards the opium habit not as a disease, but as a vice, though he does not deny that its long continuance will produce a diseased condition; but so also, he says, will alcoholic indulgence, gluttony, tea-drinking and licentiousness. He quotes the sixth chapter of 1st Corinthians in proof that the misery resulting from the habit is continued after death, and believes it should also be punished as a vice on earth! It is hardly necessary to say that afterward, when speaking of treatment, it appears that he does not adhere to this doctrine of the necessity of the *threefold* penalty, but somewhat inconsistently does his utmost to relieve the patient. Most patients desire to abandon the habit, and it is found that it may be done, with care, with perfect safety to life. Relapses frequently occur, especially if pain or calamity supervenes. The recommencing dose will be small, but the maximum will be quickly reached. Sudden deprivation of the drug, Dr. Earle thinks dangerous, from the alarming prostration which occurs. The patient must be absolutely under control of the physician, and must be treated practically as if his word was to be doubted—though some are truthful. The last dose having been taken, he should be searched in a quiet but thorough manner, and any concealed supply removed. He will need a day and night nurse, and should never be left alone. It may

take four or five days to withdraw the drug, during which time he will suffer a little. It is after the last particle is withdrawn that suffering begins, and coryza, diarrhœa, vomiting, muscular pains, and sleeplessness occur. The coryza lasts but a few days, and is treated with carbonate of ammonium, quinine and cubebs, and a snuff of morphia, bismuth and acacia. The diarrhœal discharges are dark, and quite painful. Astringents and acetate of lead are to be used. The vomiting comes with the diarrhœa, and is controlled with carbolic acid, bismuth and ice. The muscular pains are the most troublesome symptom, unless it be the feeling of depression or letting down, which early occurs. The hot bath is useful, and any anodyne not containing opium. Iron, bark and strychnia are used early and throughout the treatment. Bromide of sodium has been of use. The fluid extract of cocoa has been found of great use in the late cases in which it has been tried, if the stomach will retain full doses, and enables the morphia to be withdrawn more promptly. In one case, however, there was reason to fear the formation of a cocoa habit. Sleep usually comes after five or six nights, but in nervous patients chloral or some hypnotic should be given, with caution, lest a habit should be formed. The symptoms are not as severe where the drug has been used hypodermically. A patient will resort to any subterfuge to get the drug, and until several days or weeks have been passed without it, his moral sense is in abeyance, and he cannot be trusted. The various "opium antidotes" in the market are composed of some form of opium, belladonna, canabis indica, chloral, etc. Dr. Earle believes that physicians' prescriptions containing opium, chloral or alcohol should bear a printed request to the apothecary not to renew them without direction, and that the greatest caution should be used in prescribing and continuing such drugs. A patient should never be taught to use a hypodermic syringe.

Dr. J. D. Irwin, in St. Louis Clinical Record, reports the following case of opium habit treated with cocoa:

In this case of opium habit treated with cocoa, a lady, having begun to use morphia for the relief of pain, at last reached the amount of sixteen grains daily. Thirty hours after having relinquished it, she was found in great agony, excitement and restlessness. Bromide of potassium and hydrate of chloral were used in large doses through the night, to allay excitement and produce sleep. The next morning she was very weak and restless, scarcely able to speak, troubled with vomiting, and with a pulse of one hundred and fifteen. The fluid extract of cocoa was given in tablespoonful doses. The first dose produced little effect. The second was followed by a wonderful change; the pulse fell to 85, her face was flushed, the vomiting ceased, her countenance was lively, she talked and laughed quite freely, and in the afternoon was able to sit in a chair. She slept about half the next night, and woke quite lively and refreshed, with a pulse of 75. She enjoyed and digested her breakfast. She continued to improve, in two days took a long drive, and the next day left the city with an eight-ounce bottle of the cocoa, which she took in smaller and smaller doses, and then, relinquishing it, enjoyed good health without the aid of morphia.—*New York Medical Journal.*

Minor Anæsthetics.—We close our notices of the several anæsthetics with a consideration of the minor ones.

Bichloride of methylene is one of these. It hasn't much rank—is chiefly celebrated as being the anæsthetic under which Spencer Wells has done a number of his ovariotomies—two hundred and eighty indeed. The anæsthetic committee speak of it as bichloride of methylene *so called*, as its boiling point is not definite, and it is evidently a mixture. Dr. Kappeler charges it with nine deaths, and his conclusions are "that experience shows it to be as dangerous, if not more dangerous than chloroform." The experiments of the anæsthetic committee confirm this view, its depressing action on the heart being marked.

Dichloride of ethedene is the result of the study of the anæsthetic committee for some agent less dangerous than chloroform. They believe that they have found it in dichloride of ethedene—"an isomeride of ethene dichloride produced from aldehyde." Experiment with lower animals showed it a perfect agent, producing prolonged anæsthesia without cardiac depression. It reduces blood-pressure, but by regular gradation, and not suddenly, as in the case of chloroform. Vomiting is sometimes produced by it. The conclusion of the committee is that although ethedene is not free from danger, it is in a very high degree safer than chloroform; that it is less exciting, more agreeable than, and as rapid in action as chloroform, and that "a very strong case is made out for an extensive trial of it." The clinical account is not extensive, but so far favorable. Dr. Kappeler records, however, that "unfortunately the occurrence of a death from the article in Berlin destroys early the hopes which had been cherished of it, and will not permit of a more extended trial." Dr. Reeve rightly enough regrets that no account of this death is given, that we might judge how much so spotless an anæsthetic was at fault.

Bromide of ethyl is the remaining anæsthetic considered by Dr. Reeve. We are indebted for its introduction in America to Dr. Turnbull, who claims originality in its use upon man, and his able coadjutor, Dr. Levis. Dr. Nunnelly, of Leeds, experimented on animals with it as early as 1849, and his experience with it as an anæsthetic with patients was the subject of a paper read by him before the British Association in 1865. Dr. Levis, upon the basis of seventy-one administrations, declares he has "used it under the most varied circumstances which could be required to test the merits of an anæsthetic, ... and in the most abnormal conditions of debility and shock of injury; in capital operations, through protracted periods of administration, in patients from early infancy to extreme old age;" and declares his conviction that it is practically the best anæsthetic known to the profession." These were brave words of Dr. Levis, and he had not written them very long before a death at his clinic taught him that the prophecy of anæsthesia must be built not on tens, but on tens of thousands observations. Another death on the bromide of ethyl, recorded by Dr. Sims, also hastened to dispel a fancied security in the new agent.

The bromide of ethyl is put foward with the usual claims for preference—safety (of which we have seen), quickness and pleasantness of action. These points are not thoroughly proved. It may be re-

membered that the *Louisville Medical News* was one of the first journals to record clinical experience (in the person of one of the editors) with the new agent. The account was not strikingly in its favor.

As we cast about for closing words which will sum up the question of anæsthesia, those which are used by Dr. Reeve are better than any we can put together, and we give them entire:

Our task has been executed during a period of greatly renewed interest in and study of anæsthetics. In regard to some the ink had scarcely dried before new facts were presented for consideration or statements had to be modified. This awakened interest in the subject, and this rapid investigation of new agents attests at once the great importance of the subject and the earnest desire of the profession for a pleasant anæsthetic safer than any we now have. Such an one is not yet found. Every one must deeply regret that a death should have occurred to shake confidence in an article which promised a realization of our hopes. Yet when we reflect on the number of successful inhalations necessary to prove that a new anæsthetic is better than those already tried, the difficulty of the problem is appreciated. The new candidate must have been used thousands of times before it can rival chloroform or the mixed vapors, and tens of thousands before it can be compared with either in regard to safety. Were this fact kept in view there would be fewer journal articles and less dogmatism on this class of remedies. Is it probable that a perfectly safe anæsthetic will ever be at our command? The time necessary for the proving of new agents makes this very improbable during the lifetime of those who saw the advent of ether and chloroform, and the retrospect we have made is not favorable to an affirmative answer. Disaster has followed the use of all, and the facts now will sustain Velpeau's statement as well as when he made it, and still justify Erichsen's words: "With every possible care it appears certain that the inhalation of any anæsthetic agent is in some cases almost inevitably fatal." The inference is that what has been so universally true in the past will be true in the future, however sad this may be to the philanthropist or to the enthusiastic surgeon. Unfortunately physiology teachss the same lesson: a state of artificial anæsthesia is a state upon the borders of death.

The great practical lesson of all facts and all theory is that in the use of anæsthetics no precaution can be superfluous, no care too minute, and no watchfulness too great.

Recent Studies on the Nature of Malaria.—*Le Journal d' Hygiene* was the first scientific organ which made known in France the remarkable work undertaken in Italy by Professors Edwin Klebs and Tommasi Crudeli—work which has led these *savants* to a discovery of the highest importance, viz.: To know the specific agent of malaria. The following are the results obtained by these new observers:

1st. In all the malarial country of the Roman Field they have found the *bacillus malariae* already developed (Cuboni—and by artificial culture it can be produced in great quantity). It has not been met with in the country in the healthy localities of Lombardy.—(Cuboni.)

2d. This same *bacillus* is accumulated sometimes in such consider-

able quantities in the strata of air which lie over the malarious districts during the hot days of summer that, to gather it, special apparatus is useless. It is found in abundance in the sweat of the forehead and hands.—(Cuboni.)

3d. During the height of the fever, sporules of the *bacillus malariae* are constantly present.

(*a*) They are also found in the blood of hares, which have been subjected to the malarial infection.—(Ceci.)

(*b*) In the blood drawn from the veins of men similarly tainted.—(Marchiafava, Perrancito, Ferraresi.)

(*c*) In the blood taken from the spleen of the same invalids (after a process conceived by Dr. Sciammanna).

(*d*) By the examination of this blood, has been obtained the *bacillus*, perfectly developed, and presenting the same forms already described by Klebs and Tammari.—(Crudeli, Ceci, Cuboni, Ferraresi.)

(*e*) The same has also been obtained by the examination of the spleen of persons dead of pernicious fever. Examinations made of the spleen of those dying of other maladies in non-malarious regions give negative results.

4th. If the blood drawn from the veins of invalids, tainted with marsh fever, is injected in the subcutaneous tissue of dogs, it produces in these animals the same disease.—(Marchiafava, Ferraresi, Valenti, Sciammanna, Piricilli.)

5th. In all cases where the blood of those tainted with malarial fever has been drawn from the veins during the inception of the fever, this blood usually contains the fully developed *bacillus* in considerable quantities. In the height of the fever, on the contrary, as we have already said, the *bacillus* disappears to give place to its sporules.—(Marchiafava, Ferraresi.)

The invariability of this last result, analogous to the facts observed in the study of *spirillum*, which causes typhus, is of considerable importance in the question which now occupies us. First of all, it gives us the explanation of the differences of the results obtained during the summer of 1879 by Prof. Marchiava, in the series of examinations made of the blood of five persons dead of pernicious fever—the examinations being made immediately after death. In three of these the blood in the veins and heart contained a great number of fully developed *bacilli*, while it was impossible to find in the blood of the other two a single *bacillus*, but only a remarkable quantity of spores. Facts newly discovered at Rome lead us to believe that the first three died during the period of invasion; the other two, on the contrary, must have perished during the crisis of the fever. Experiments on animals have demonstrated that the chosen seats for the parasite which produces malarial fever, are the spleen and the medulla of the bones, organs which invariably are the seat of the gravest pathological changes in persons who have succumbed to this affection. It is probable that the production of the new generations of the parasite in these organs varies in rapidity according to individual disposition, and perhaps also according to the quality of the land whence the parasite comes; this will explain the great variety which is observed in the duration of the intermission in marsh fever. Probably the occasion of fever is produced only at the moment when the emission of the parasites, coming prin-

cipally from the spleen, comes to a point similar to the stage of those found in quantities in the blood. Perhaps, also, the cold of the febrile invasion is due to the irritation of the vaso-motor nerves following the presence of this army of invaders in the circulatory system. These organisms find in the blood the most favorable conditions, for accelerating their evolution, viz.: heightened temperature and oxygen stored up in the red globules. It is not astonishing that their disorganization should be already complete at the height of the fever. On the other hand, the great number of reactions undergone in the blood and tissues, and the resulting assimilations and excretions, sufficiently explain the development of the febrile heat.—*Virginia Medical Monthly.*

An Interesting Case from Practice.—Dr. W. A. Fannin, in Monthly Review of Medicine and Pharmacy, says:

Mrs. B. called at my office at 12:30 p. m., August 3d, 1879, bringing with her a child thirteen months old. The child was breathing heavily, and partially unconscious, and had had numerous passages, green in color, with white particles in suspension. Pulse 160, temperature 107½°. Examination of lungs: Right side slightly dull on percussion over lower lobe; auscultation; coarse mucous rales over both lungs. I ordered

Potass. nitrat., ... **gr. j.**
Ex. hyoscyami, ... **gr. 1-12.**
Tr. aconiti rad., ... **gtt. ss.**
to be given every two hours.

5 p. m.—Pulse 160. Temperature 107½°. Respiration shallow and abdominal; eyelids partially closed; eyeballs turned up and in divergent strabismus, and in a state of tremor. Patient had a movement every five minutes at least, and of same character. I told the mother the child would die in half an hour, and proposed a cold bath, by which the temperature fell to 102°; same internal treatment.

9 p. m.—Child had one passage in the interval of time; rested well and recognized the parents. Temperature 106½°. I gave another bath; while in the bath the child fell asleep. On taking it out of the bath respiration ceased, which I easily re-established. Temperature 98°; breathing regular and the child asleep; bowels bloated.

August 4th.—Child passed a quiet night. No movement of fæces, but passes large quantities of wind. Temperature 103°. Coughs a little. I ordered cold cloths to the abdomen and head; same internal treatment.

1 p. m.—Temperature 101°. No movement of the bowels; nurses well when awakened. I bandaged the abdomen to control the flatus.

9 p. m.—Temperature 100°. No movement. I administered ʒij castor oil, and ordered

Potass. citrat.,
" nitrat.
Ammon. carb., ... aa gr. xxxij.
Hydrargyri chlor. corros., ... gr. ⅛
Aq. ..... ʒiv.

Sig. Teaspoonful every two hours, and advised an excursion on the water for the next day.

Aug. 5th.—Been on the water; the oil operated twice; flatus gone; stool of right color, and the child has been bright all day.

Aug. 6th.—Been on the water again; had one movement, normal in color, etc. Same internal treatment.

Aug. 7th.—Temperature 99°. Stools normal; child discharged cured.

This case shows that even extreme cases should not be given up as hopeless. I have seen comparatively hopeless cases likewise benefitted by the cold bath, and I never hesitate to administer it when the child has a temperature over 103°. That the cure was due in this case to the bath cannot be doubted, as the internal treatment was directed to the fever only.

The Use of Anæsthetics in Labor.—Few surgeons hesitate to use anæsthetics in almost all surgical operations at the present day, whether they be great or small, and with but little or no risk if a pure drug is judiciously used. We must admit, if we are honest with ourselves, from the foregoing, that in the majority of surgical operations the death tendencies are much more evident than they are in the majority of obstetrical cases.

Death, following a surgical operation, is generally the result of shock, anemia of the brain or general debility, all of which we are compelled to admit anæsthesia very greatly favors.

Death, in the parturient condition, as a rule, is either from hemorrhage, over-exertion, or consequent reaction, plethora, congestion of the brain or convulsions, all of which, except the former, find a ready and reliable antagonist in our anæsthetics—and the danger of the former are not in the least degree increased.

These facts naturally press us to the legitimate conclusion that the parturient woman is physiologically in a safer condition for the use of an anæsthetic than the surgical patient; while no surgeon questions the propriety of giving chloroform in almost any case, whether it be a capital or minor operation.

Then, why should we not use anæsthetics in labor as well as in our ordinary surgical operations when they are not contra-indicated by her condition physiologically, but on the contrary act favorably?

The past experience of our best accoucheurs who have been using anæsthetics for a score of years, almost with one accord testify to its happy results upon the mother's health, whilst in all cases it has soothed their suffering and saved them from the excruciating expulsive sive pains of labor. By reference to my private notes on obstetrical practice, I find that one ot the most careful and guarded of instructors in the University of Pennsylvania, who is always careful not to venture an opinion before he is satisfied with its orthodoxy, Prof. R. A. F. Penrose, in a private conversation with him some years ago, gave it as his opinion then, that the careful and judicious use of anæsthetics in the later stages of labor, and in hard labor, and especially in dystocia, was certainly one of the modern God-sends to the suffering female; but also added that great care should be used to guard against hemorrhage, and especially in those persons who were predisposed to it. For, said the professor, its application in this department of the medi-

cal science is comparatively recent and demands the closest scrutiny on the part of the accoucheur.

In a private letter from my esteemed and worthy friend, Prof. John J. Reese, of the University of Pennsylvania, who first instructed me in this branch of our healing art, and who has had the experience a score of years affords in this particular direction, says: "I have no reason whatever to change my views as regards the efficiency of anæsthetics in labor; I think they are not called for in ordinary mild cases, unless the patient is very nervous and timid. But I never fail to use them in hard labors, and always in instrumental ones." Cazeaux says that "when properly administered, and in moderate doses, anæsthetics do not interfere with the regular course of the uterine contractions." Instead of the wild excitement, horrified with the possibilities of impending dissolution, by a proper and careful etherization of the patient, she passes into a quiet and peaceful slumber while the laboring uterus continues its course uninterrupted. The soft parts are aided in their relaxation, while a strong barrier is placed against that dreaded and oftentimes fatal calamity, puerperal convulsions. Thus the labor proceeds quietly and peacefully to a happy end, and the wild shrieks and sobs of despair so common on these occasions are silenced by a peaceful rest in the arms of morpheus.

Having satisfied ourselves that the results from the use of anæsthetics in labor are beneficial rather than injurious to the mother, we will glance at its effects on the fœtus. Cazeaux says, that "whatever difference of opinion may still remain respecting the influence of chloroform upon the health of the mother, no one doubts its entire innocence as regards the fœtus. In the immense majority of cases the new-born child presents its usual appearances; its cries are neither weaker nor heard less promptly, nor does its viability appear to be in any way injured."

We have not, and will not, lengthen this by proving our statements with a detail of cases which can be found by those who wish to investigate the subject still further in almost any obstetrical journal or standard work on obstetrics. We have simply given you a summary of the conclusions we have arrived at from our own experience in the use of anæsthetics in labor, backed by that of standard authorities whose experience of a score of years has led them to confirm their use.

Thus far we have said nothing about the use of anæsthetics in dystocia, in which condition they are absolutely invaluable, not only for the relief of pain from any operation which it may be necessary to subject the patient to, but by rendering the patient motionless, and thus facilitating any manipulation which may become necessary.

The objections to the use of anæsthetics in labor, lest you should be obliged to give other remedies, is only a popular bug-bear and without foundation; for in obstetrical practice it is seldom if ever necessary, except in some operation, to push anæsthesia to perfect unconsciousness, but simply to the relief of pain, and in that condition there is seldom any trouble in getting patients to take almost any nostrum you may desire.

It is scarcely ever necessary to use an anæsthetic before the last stages of labor, although it is not entirely objectionable.

Prof. John J. Reese says, in the same letter referred to before, that

as a rule in his private practice he does "not administer them until the head is well engaged and the labor pains become decided. I do not keep the patient all the time fully etherized, but let her inhale a fresh dose just as the pains come on, and very generally she is unconscious of the last pain, and remains so for a few minutes after the expulsion of the child.

In my own practice my rule is not to commence the use of the anæsthetic before the os is dilated to, at least, the size of a common nickel, before which the woman will bear her pain with but little complaint. I have found that the danger of delay in labor is much more liable to occur from the use of an anæsthetic too early in labor than by the too free use of it after labor has advanced.

It may be laid down as a rule before commencing the use of an anæsthetic, to give a dose or two of the fluid extract of ergot which will not only facilitate the uterine contractions, but act as a safeguard against any tendency to hemorrhage. Of late I have generally used quinia in from three to five grain doses or the two combined, and have always obtained the most happy results from their use.

A diversity of opinion still exists as to the best and safest anæsthetic to use. Cazeaux advises the use of chloroform; Prof. Reese uses pure washed ether, six parts, to pure chloroform one part, to be mixed just before using; Dr. Barr of Philadelphia uses ether three parts, chloroform one part, and alcohol, two parts. The formula which I have been using is

℞ Chloroform (Squibb's) ..... ℥ ii
Aeth. sulph. (Squibb's) ..... ℥ ii
Alcohol absolute (Squibb's) ..... ℥ j

from which I have always had the most desirable results.

We trust the few suggestions we have given you may receive a fair and impartial trial, especially by those members of our profession who are as yet strangers to the use of anæsthetics in obstetrics; and may they seek early to use the elements which God Almighty has placed at their command, and set them as guardians over, with which they can calm the troubled sea of pain and agony, and say "Peace be still."

Before closing let me ask you, Is it fair, just and honorable for you to favor the stalwart man with this boon of relief for a trifling operation, or endanger without hesitation the feeble patient who comes to your office with one foot in the grave and the other on its very brink, and yet deny our mothers, wives, sisters, daughters and the female world at large, who year after year travail in pain and anguish together, and yet who are physiologically well, and who run less danger from its use than the former? Just think of it for a moment, and ask yourself the question, Is it not more from prejudice than reason?

Syphilitic Ulceration of Velum accompanied with a Large Perforation.—The patient when first examined had all the evidences of tertiary syphilis in the buccal cavity. The entire mucous membrane covering the fauces was greatly congested, the inflammatory redness being of a dusky color, a characteristic peculiar to syphilitic cases, and one that will often enable the expert examiner to instantly diagnose the disease correctly. On the right side of the soft palate,

midway between the base of the uvula and the attachment of the velum to the side of the throat, an opening large enough to allow of the passage of an ordinary lead-pencil was distinctly visible. The entire circumference of the above orifice was in an ulcerated condition, and the tissues for at least a line beyond looked as if they were about to become involved in the destructive process. The cause of all this trouble was so apparent that it was hardly necessary to ascertain the patient's preliminary history. In response to the usual questions, the patient replied "that he had contracted chancre twenty years ago, and that he had suffered from pains in the bones for a long time."

The stereotyped course of treatment in a case such as the one portrayed above would be to freely cauterize the edges of the perforation with the stick of nitrate of silver, and to administer internally the antisyphilitics, mercury and potash, either singly or combined. Now, instead of pursuing this plan, I, following an idea which had been applied by me to several other forms of syphilitic throat troubles, made no local application whatsoever, but simply prescribed the iodide of potash in large doses frequently repeated. The result was most gratifying, for at every attendance of the patient the perforation was smaller, until finally it disappeared altogether, the entire treatment occupying but ten days. There were several physicians who were attending the hospital as students during the treatment of the last-mentioned patient, and who followed up the case in all its stages with great curiosity. They, one and all, expressed themselves as greatly surprised at the wonderful result produced.

With reference to the throat, there is no doubt in my mind regarding the powers of the system to restore lost tissues, providing the destructive process has not gone too far, and the proper plan of treatment be pursued. I have in several marked instances seen a partially destroyed cord, which had superinduced a great amount of hoarseness, return to its normal condition with a complete restoration of the vocal powers. I have also noticed the same thing repeatedly with reference to some of the adjoining organs.—*Medical Record.*

Iodine as a Specific in Croupous Pneumonia.—The treatment of croupous pneumonia has some time since lost its former active character; since we could but recognize that the course of the disease could not be influenced by any of the present plans of medication. A startling statement now appears by Dr. F. Schwarz, in the Deutsche Medicinische Wochenschrift, (No. 2, 1881,) who claims that the disease may be abated by iodine or iodide of potassium. He quotes statistics in the first place from the most reliable German sources, according to which the crisis occurred in 0.6 per cent. during the second day, in 4.7 per cent. during the third, in 7.4 per cent. during the fourth, in 15.9 per cent. during the fifth, in 13.6 per cent. during the sixth, in 22.8 per cent. during the seventh, in 11.8 per cent. during the ninth day. These statistics refer to 933 cases of croupous pneumonia treated expectantly. In opposition to these figures Schwarz gives his results as the proof of the efficacy of his treatment. He has had altogether 98 cases, in ten of which the abortive treatment succeeded. This treatment is successful only when begun as soon as the disease

starts. If instituted later it seems to be powerless. The inferenee to which the author leads us is that he saw none but the ten cases quoted at a sufficiently early period, but he does not state this point in so many words. By reproducing the temperature curves he proves that the aborted cases commenced in the usual characteristic manner. In all of these the crisis was completed during the second day. The defervecence took from 6 to 18 hours, on an average about 12 hours. The quantities given were very small, one sixth of a drop of tincture of iodine, or about one grain of iodide being taken every hour. After the fever had ceased the local symptoms began to recede rapidly.—*Chicago Medical Review.*

The Prevalence of Leprosy in the United States.—At the meeting of the Academy of Medicine, on January 20th, Dr. H. G. Piffard read a paper on leprosy. In this paper and in the subsequent discussion, some facts of much interest, and perhaps of great importance, were brought out. From the statistics collected by the Dermatological Society, it appears that there are between fifty and a hundred lepers in the United States at present. Moreover, an examinatlon of the tables show that this number has been constantly increasing every year. In view of these facts the question of the contagiousness of leprosy is a most important one, and it was discussed very carefully by the reader of the paper and other gentlemen present at the meeting referred to. Dr. Piffard was inclined to believe that, though not contagious in the ordinary sense of the word, it might be so through the medium of the blood or secretions, as in the case of syphilis. Furthermore, it was a well-established fact, that when leprosy had once gained a foothold in any community it was very sure to spread in some way. A marked illustration of this was to be seen in the Sandwich Islands. Forty years ago there was no leprosy there; now one-tenth of the inhabitants are lepers. Honolulu, a place once entirely free from leprosy, now has two hundred and fifty cases of the loathsome disease.—*Medical Record.*

Report on Yellow Fever in the U. S. S. Plymouth.—It will be remembered by most of our readers that yellow fever broke out in the steamer Plymouth under very strange circumstances The steamer had been on duty in the tropics, and several cases of yellow fever had occurred on her. She then rerturned to Boston in the winter. Here she was thoroughly disinfected by the best known methods, and further, every part of the vessel opened and exposed for a long time to the frost of a very severe winter. But, in spite of all this, as the ship neared the tropics, before she had come in sight of any land, several cases of yellow fever broke out on ship board. A commission was now appointed by the Navy Department to investigate the causes of this phenomenon. The entire report is worthy of study by all interested in the destruction of the elements of the disease, or in preventing their ravages. It appears that in this case the timbers of the ship were so constructed as to prevent the disinfecting agents from reaching some of the worst decaying spots. It is clear that the germs of disease remained unharmed in the rotten timber, in spite of the intense cold and disinfectants. The report further says that "the use of car-

bolic acid, chlorine and its compounds, sulphate of iron, nitrate of lead, and chemical disinfectants generally, are however effectual in destroying odors, of very doubtful efficacy in destroying the germs of disease." It excepts sulphurous acid gas. This seems to have a special power in the destruction of animal or vegetable life. Besides, the filling of the vessel with steam at a temperature of 250° Fahr. seems to be a convenient and effective mode of destroying the elements of disease.—*Detroit Lancet.*

Dermic Dressing in Variola.—Dr. A. S. Hudson says, in Med. and Surg. Reporter: Pulverized talc, or steatite, is a most elegant dressing for moist skin affections of both infants and adults. For ten years it has, in my hands, proved a useful medicament and choice vehicle, topically employed. During the last three months some thirty cases of small pox have come under the writer's observation, in which steatite has answered a most desirable object. Sweet oil and glycerine, mixed in equal parts, is applied for two or three days to the heated skin and forming pustules. As soon as the pustules are matured, or turn yellow, the steatite is applied over the face, neck and hands, mixed in water, in the form of paste or whitewash; repeated as often as it falls off or is rubbed off.

It is an energetic absorbent, a deodorizer, overcoming that evil smell peculiar to variola. It controls the "itching burning" of the surface. It prevents the second formation of crust over the pustules, and thereby renders the pits in the skin less distinct. To the touch it is soft as velvet and as adherent as bronze. For the above named needs it seems to be the Geodine of earths.—*Med. and Surg. Reporter.*

Fuchsine in Bright's Disease.—Prof. Renzi says, in *Pharm. Cent.*, that fuchsine (red aniline free from arsenic), may be used to prevent the formation of albumen in the urine. He administers it in the form of pills of 2½ centigrammes (¾ grain) each, beginning with two pills, 0·05 (4-5 grain), and increasing the dose to 0·25 (4 grains) in twenty-four hours. The urine becomes red and continues so during the treatment, and the appearance of the color is an indication of the efficacy of the remedy; if it does not appear, it is prevented by some organic hindrance which renders the remedy in such cases useless. Fuchsine will also cause the mucus, which is often found in the urine during this disease, to disappear.—*Drug. Cir.*

Treatment of Asthma with the Induced Current.—Dr. I. Burney Yeo relates, in the Lancrt, his experience at Neuenahr, where he saw the induced current used in the treatment of asthma. It sometimes acted like magic, curing the cases completely in a week or two. The electrodes are applied usually on each side of the neck, about an inch below the angle of the jaw. The current must be of good strength, so that the patient can feel the stream go across the larynx and soft palate. In bad cases it should be applied twice a day, from fifteen to thirty minutes each sitting. Dr. Max Schaeffer, who first advocated this treatment, found that the constant current never did any good.—*New York Medical Record.*

On Cholera Infantum.—A writer in the Medical and Surgical Reporter, thus gives his experience in the treatment of Cholera Infantum:

At the commencement of my professional career, twelve years ago, I lost, in rapid succession, several cases of cholera infantum treated according to the methods indicated in the standard medical works of that time. Soon after, I saw, in some medical work published in New York city, the histories of ten or twelve cases treated successfully with small doses of bromide of potassium. I immediately began its use, and in connection with subnitrate of bismuth and rigid dietary regulations nearly every case since, coming under my care, has terminated in recovery. The subnitrate is given every three hours, in doses of five to fifteen grains, and the following formula of the bromide is used:

℞ Potassi bromidi..... gr. xvj.
Aquæ destillatæ. unciam.
Sig. Coch. min. quaque hora sinnen deun.

If the child has not been weaned the diet of the mother is carefully regulated. She is restricted to toasted bread, a little milk or egg, with tea and coffee, if the latter are habitual.

The flour of which the bread is made is inspected, that it may be known to be good. The child is allowed to nurse only once in three hours, and the amount is diminished. Idiosyncrasies, if any, of the child are detected. Thus in one case a mouthful of chicken taken by the mother, in another two teaspoonfuls of milk from a certain cow, used in tea, acted as a cathartic upon their respective infants. The mother is directed to obtain at least eight hours' sleep daily, and to effect this the child, during that time, is committed to the care of a nurse. Of course the mother is roused to nourish the child, but this being performed she is again permitted to sleep. If the infant has been weaned it is confined to cow's milk diluted with rice-water, varying the proportions according to circumstances.

The milk, if possible, is given while it yet contains the animal heat, and, of course, is milked from the cow as required. The cow now occupying the office of mother must be in good health, should be in a stable perfectly clean and ventilated, furnished with abundance of food and pure water, and in no way irritated. Rigid adherence to the above plan, modified more or less by circumstances, has, as above stated, been uniformly successful for the past ten years, and being so long continued cannot be attributed to good fortune, neither to climate, as it has been equally successful in New England, Virginia and Kansas.—*Monthly Review.*

Pilocarpin in Diphtheria.—The effect of pilocarpin in diphtheria is, according to various German writers, most admirable. Dr. Guttman says that, given internally a free salivary discharge is established, by which the diphtheritic membranes are softened and dissolved, the inflammatory phenomena rapidly lessen and disappear; and the condition of the patient is speedily improved. Out of sixty-six cases, many of them severe, he *did not lose one*, and they all were cured in from twenty-four hours to three days!—*Med. and Surg. Rep.*

SCIENTIFIC ITEMS.

Luminous Paint.—We have already given some account of Balmain's luminous paint, patented not long ago in England. We do not know whether any experiments have been made with it in this country, but it is being tested in various ways in England, and thus far with very satisfactory results. It has been applied to ceilings as a water-wash, and the effect by night is that of "a subdued light, every object in the room being clearly visible." The luminosity, as our readers will remember, is excited by ordinary daylight, and its effects continue about thirteen hours, so that it is well adapted for bed-rooms, passages that are dark at night, and other places where the use of lamps would be objectionable or inconvenient. The London *Building News* says:

For staircases and passages a mere band of the paint will serve as a guide, and costs but a trifle. For out-door purposes the oil paint is used, but for ceilings and walls the luminous paint mixed with water and special size can be used, the same as ordinary whitewash, and presents a similar appearance in the daylight. We have previously given a short account of the many applications of which this paint is capable, but the comparatlvely recent discovery that it can be applied as ordinary whitewash, considerably expands the field of its usefulness. Sheets of glass coated with the paint form Aladdin's lamps, which are in use in some of the vessels of the navy, at the Walham Powder Factory, at Young's Paraffin works, and in the spirit vaults of several docks; but now that, by increased production and the use of water as the medium, the cost is reduced by one-half, it will probably be extensively used for painting walls and ceilings. The ordinary form of oil paint has already been applied in many ways to statues and busts, to toys, to clock-faces, to name-plates and numbers on house-doors, and to notice-boards, such as "mind the steps," "to let," etc. The paint emits light without combustion, and therefore does not vitiate the atmosphere. Several experimental carriages are now running on different railways, the paint being used instead of lamps, which are necessary all day on account of the line passing through occasional tunnels. —*Boston Journal of Chemistry.*

A "National Radiant" Fluid.—During the past month a "trial" was given in this city of an alleged substitute for kerosene oil, which is represented to cost much less, and to be perfectly "non-explosive." The usual empirical experiments to prove the safety of this mixiure were made, as lighting it with matches, dropping burning coals into it, etc. It is stated that the base of this new fluid is naptha, with the addition of thirteen cheap ingredients. Among these are potatoes, salt, alum, sulphuric acid, and other substances, all of which might be replaced with soot or sand, so far as they prevent explosions. It may sometime become generally known that there is no possible substitute for good standard kerosene, and that naptha is still dangerous, no matter how many vegetables are stewed up with it.

This dangerous mixture is manufactured in Cleveland, Ohio, and it

is said that a large quantity is to be put upon the market. Our readers will take warning, and give the new "National Radiant" oil as wide a berth as if it were so much nitro-glycerine. The only safe oil, as has been intimated, is standard kerosene; and it is in the end the cheapest, as doctors' and undertakers' bills foot up much more than any saving made in purchasing cheap naptha under the name of "Radiant Fluid."—*Ibid.*

Toughened Lamp Chimneys.—The following recipe is from a Leipzig journal devoted to the glass interest: Place your tumblers, chimneys, or vessels which you desire to keep from cracking in a pot filled with cold water, add a little cooking salt, allow the mixture to boil well over a fire, and then cool slowly. Glass treated in this way is said not to crack even if exposed to very sudden changes of temperature. Chimneys are said to become very durable by this process, which may also be extended to crockery, stoneware, porcelain, etc. The process is simply one of annealing, and the slower the process, especially the cooling portion of it, the more effective will be the work.—*Ibid.*

Preserving Wood.—The improved French method of preserving wood by the application of lime is said to work well. The plan is to place the planks in a pile in the tank and to put over all a layer of quicklime, which is gradually slacked with water. Timber for mines requires about a week to be thoroughly impregnated, and other wood more or less time, according to its thickness. The material acquires remarkable consistence and hardness, it is stated, on being subjected to this simple process, and the assertion is made that it will never rot. Beechwood prepared in this way for hammers and other tools for iron-work is found to acquire the hardness of oak, without parting with any of its well-known elasticity or toughness, and it also lasts longer. —*Ibid.*

Providence of Bees.—The Melbourne correspondent of the Dundee *Advertiser* narrates the following interesting proof of the provident and far-seeing instinct of bees: Turning from men to insects, a singular circumstance is reported from a hot, dry valley in New South Wales. Last year the drought there was of long duration, and the denizens of the apiaries suffered much from it. This year the bees have made provision against a similar emergency. They have filled a large number of the external cells in every hive with pure water instead of honey. It is thought that the instinct of the little creatures leads them to anticipate a hot summer. But that they should have gone further, and, by an act which, as far as I know, is without precedent in the habits and customs of their tribes, have created reservoirs to tide over the water famine, is a noteworthy fact indeed.—*Ex.*

A New Oxide of Boron.—From recent experiment and analyses in France, it would appear that there exists a combination of boron with oxygen which has hitherto escaped the notice of chemists. The new boric acid is denoted by B_2O_4, and being the most oxygenated compound of boron known, has been named *perboric acid.*—*Ex.*

PRACTICAL NOTES AND FORMULÆ.

For Vomiting in Pregnancy—Dr. Goodell recommends:

℞ Cerii oxalatis, } aa gr. j.
Ipacacuanhæ, }
Creosoti, gtt. ij.

M. Sig. To be taken every hour.—*Med. Gaz.*

Jamaica Dogwood in Treatment of Pertussis.—Dr. W. R. Alexander, of West Virginia, in Therapeutic Gazette, is quite enthusiastic in his recommendation of this new drug. He says the effect in whooping-cough was quite satisfactory, and in his hands it proved a specific in a number of cases. He now orders it in this disease with as much confidence in its results as he does quinine in malarial affections. Sustaining the patient's strength by stimulants and nourishment, he gives it to children at all ages and in any stage of the fever. The initial catarrh and the catarrhal stages are decidedly benefitted, and the spasmodic attack in many cases wholly aborted.

He recommends the following prescription:

℞ Fl. ext. Jamaica dogwood, ℥jss.
Syr. tolu }
Syr acaciæ, } aa ℥ ij.

M. Sig. Teaspoonful every two, three or four hours, according to the violence of the spasm or cough. A few drops of the fluid extract in a teaspoonful of water may also be given with good results.—*Louisville Medical News.*

Dysmenorrhœa—Dr. Pearson, in Medical and Surgical Reporter, says: I have, for some time past, treated cases of dysmenorrhœa as follows, with very satisfactory results—

℞ Iodidi potassii, }
Bromide potassii, } aa ℥j.
Syr. simp., ℥ iij.

A teaspoonful to be taken three times daily, commencing ten days previous to menstrual period.

When pain commences—

℞ Tinct. opii. camph ℥ ij.
Morph. sulph gr. ij.
Ol. piper gtt. ij.

A teaspoonful every three or four hours while pain continues.

The above has proved very satisfactory to me and may be worth something to others, as I have seldom had to repeat the course more than once to effect a permanent cure.

Removal of Nævus.—Dr. Sigler states, in the Pharm. Centralb., that nævus may be removed by means of croton oil, in the following manner: Push a number of needles through a cork, so that the points project 3 to 4 millimetres. Dip the points in croton oil, then insert them in the mole and withdraw. This is a sort of Baunscheidtismus. A scab will form upon the mole; and after it has dried up and dropped off the operation is twice more repeated.

Chemistry of Common Life.—Dr. J. Hendree, of Alabama, writes: Ought not teachers in common and other schools to have some knowledge of the chemistry of every-day life? I read, recently, that a female teacher in a Pennsylvania school put wood ashes in the mouth of a child six years old to punish him, she said, for telling a lie. Is a person competent to teach who does not know the common fact, familiar to an Alabama negro, that ashes and water will form caustic ley? Of course, the child's mouth, lips and throat were perfectly excoriated. Comment is unnecessary.

I believe the education of our children in the physical sciences, especially the chemistry of common life, should be commenced at an early age, with plain, cheap apparatus and simple, attractive experiments. Knowledge thus inculcated is not forgotten.

Gastritis.—Dr. R. S. Forehand, of Georgia, suggests the following treatment for gastritis: The first indication of treatment in this, as in all other affections, is to remove the exciting cause; first stop the vomiting and open the bowels by injections of warm water; after the bowels are open put a large blister over the stomach, also take sixty grains of chlorate of potash put in four ounces of water, give one teaspoonful every two hours. It will be advisable not to give any other medicines by the mouth, except calomel. It is well borne by the stomach, as long as acute inflammation exists. You can give small doses of Dover's powder every two or three hours to keep your patient quiet. Also, if the skin is hot and dry, give ten or fifteen drops of spirits of nitre every three hours. If your patient would like to eat something, let it be light, such as milk punch every three or four hours.

Acute Catarrh..—

℞ Tinct. iodinii ..... ℥ ss.
Acid carbol..... ʒ j.

M. Sig. Place a small, wide-mouthed bottle, containing a moistened sponge, in a vessel of hot water; drop five to ten drops of the solution on the sponge and as the iodine vapor ascends with the vapor of the water inhale it.—*Med. Gaz.*

A Stimulating Expectorant—

℞ Am. carbonat..... gr. v.
Tinct. nux vom..... m. x.
Tinct. scillæ..... ℥ ss.
Inf. serpentar ..... ℥ ij.

M. Sig. Three times a day.—*Fothergill.*

In those cases in which chronic bronchitis is associated with emphysema, or in the second stage of acute bronchitis, where the heart is severely taxed, this combination of remedies will strengthen the overtaxed heart and clear out the air passages.—*Ibid.*

Special Affection Following Diphtheria.—In the *Prag. Med. Wohmens et Lyon Medicale* a case of pneumonia and severe myalgia is reported following diphtheria, supposed to be dependent upon the migration or invasion of the diphtheritic parasites.

EDITORIALS AND MISCELLANEOUS.

SOUTHERN MEDICAL COLLEGE COMMENCEMENT.

The Commencement exercises of the Southern Medical College took place at DeGive's Opera House, Atlanta, on Thursday evening, March 3d, 1881.

Notwithstanding the inclement weather a very large audience was present, composed of intelligent and refined citizens—the *elite* of the city. The occasion was made the more attractive by the presence of numerous ladies, and the intervals of the various parts of the programme were enlivened with strains of delightful music.

The exercises were opened with prayer by the Rev. Mr. Spalding. After which the Diplomas were delivered to thirty-eight graduates. They were arranged in two classes upon the stage. The members were separately served, each advancing as his name was called, and bowing politely, received his Diploma at the hands of Dr. Word, the Dean. When the entire class had thus received their Diplomas, they stood erect, at the sound of the gavel, and had the degree of Doctor of Medicine conferred by Dr. T. S. Powell, the President. The second class then received their Diplomas in like manner, the degree being conferred in Latin; then, at the sound of the gavel, both classes stood erect and were addressed by President Powell, in the following language:

My Young Brethren:

According to the laws of Georgia and the usages of the medical profession in America, you are now Doctors of Medicine. But you should remember that the work of instruction is not complete; its cares, its toils, its longings, its pleasures, are still before you.

If you wish to reach the apex of fame's pyramid you must enter upon your new duties from this moment, like zealous physicians just setting forth on a morning of promise, determined to bear aloft the proud flag of your profession, to advance as far as possible, the cause of humanity. May the world receive you kindly. May you be greeted with the kind words of a host of friends.

If you should not, be not discouraged, but pursue your noble employment with cheerfulness, and strive with increased ardor to enlarge its boundaries and contemplate the power with gratitude to God, which he has enabled you to acquire over the suffering and wretchedness of your fellow men, keeping steadily in view the great responsibilities which rest upon you.

Be true to the cause of science, to the dignity of your profession, to the reputation of your Alma Mater. Emulate the great and the good in all of your aspirations. Let all of the influence which you may be able to exercise in society be exerted for purposes which are dear to the patriot, the philanthropist and the Christian. Do this, and you will feel—indeed, you will know, whether life for you be robed in sunlight or darkened by trouble and tempest. Glory's temple will be the tomb, and death itself be immortality.

Go, now, my young brethren, and our prayers shall ever be, that when the trumpet-notes of the resurrection are sounded, and the muster-roll of the universe is called, that each one of you may rise from your mounds, and with the shout of divine victory on your lips, join the immortal legions of the skies.

The Ad Eundem degree was then conferred upon Dr. A F F Kerstan, an intelligent German physician of the city, and a graduate of the Kentucky School of Medicine. While the Diplomas were being delivered, the plaudits of the audience were frequent—numerous floral offerings were showered upon the stage, and rich boquets and vases laden with gorgeous and beautiful flowers were sent up to many of the class.

The Annual Address, by the Rev. C. A. Evans, next followed. We have not space for its insertion here, but it was, in all respects, an able and admirable production, and was listened to with profound interest and attention.

The Valedictory, by Dr. J. H. Redding, a member of the class, was excellent, and evinced much study and careful preparation. It was well delivered, and listened to with marked attention.

Prof. John Thad Johnson then conferred a prize (a Surgical Case) upon Dr. J. H. Redding for the best examination on the "Theory and Practice of Surgery." The Professor stated that the examinations were thorough and the contest close with a large number. Honorable mention was made of Drs. G. A. Vinson, F. G. Donehoo and N. O. Harris.

A gold medal was offered by Prof. Jas. A. Gray for the best examination in "Chemistry, Surgery and Diseases of the Eye and Ear." This also was awarded to Dr. J. H. Redding.

Profs. Nicolson and Gray awarded a Medical Case to Mr. W. D. Vinson for the best examination as a first course student, in all the branches.

The names of the graduates are as follows:

W. B. ALLGOOD,	J. M. BEARDEN,	J. A. CANNON.
S. P. CLAYTON,	W. E. COURSON,	F. G. DONEHOO.
W. A. EILAND,	H. T. EMERSON,	R. L. FITE.
W. M. GAY,	C. C. GREEN,	J. H. GREEN.
A. GULLETT,	N. O. HARRIS,	M. A. HAYES,
T. F. HOUSTON,	H. L. HOWARD,	A. S JOHNSON.
C. A JORDAN,	F. A. LIDDELL,	M. L. MAHAFFEY.
R. F. McCONNELL,	R. J. MILAM,	M. D. MILES.
W. B. PARKS,	F. H. PECK,	J. H. REDDING.
W. C. ROBINSON,	J. A. SISK,	J. R. STODGHILL.
F. G. THOMASON,	J. C. TRENTHAM,	T. L. TURK.
G. A. VINSON,	W. P. WALKER,	J. R. WEBB.

F. B. WRIGHT, G. W. WRIGHT.

At the conclusion of the programme Dr. R. C. Word, the Dean, addressed the audience briefly, as follows:

We have now to state that the exercises of the evening are over. The number of the graduating class has perhaps surprised many. It is certainly a large class for a new Institution, and would have been considerably larger had not the prevalence of the mumps and measles prevented a number from completing their studies. In respect to morals, intelligence and proficiency in their studies, the present class attained to a very high average.

I will add that the Faculty and Board of Trustees are much gratified at the presence, despite the inclement evening, of this large and intelligent audience.

They regard it as indicative of sympathy and interest in the great educational work in which we are engaged, and as furnishing another instance of the high public spirit of our people, and the generous encouragement which they have ever extended to all enterprises looking to the interest of the city and to the public good. Herein is found one of the secrets of the unprecedented growth and prosperity of Atlanta.

In the present instance both the public press and the citizens generally, have warmly co-operated in the efforts of the founders to establish the enterprise, which now is regarded as an assured success. We have already accomplished much, but have yet more in view.

A hospital must be erected in connection with the Institution before

the next session, and other important facilities added. We aim at nothing less than to make it the great, leading, central Institution in the Southern States. One, of which the city will be proud, and in which the Profession throughout the South will rejoice. One, which in years to come it will be considered a high honor to have attended, and whose diploma will be a talisman and passport into the highest professional circles in the land. We thank the audience for their presence and polite attention.

The benediction was then pronounced by the Rev. A. G. Thomas, and the audience retired pleased with the occasion, and deeply impressed with the remarkable success of the new Institution and the great prospective advantages which it gives to medical education in the South.

CATALOGUE OF MEMBERS OF THE AMERICAN MEDICAL ASSOCIATION.

The following is an analysis of the catalogue of members of the "American Medical Association," by T. B. Greenley, M. D., of Kentucky:

That old and indefatigable student, Dr. Toner, of the U. S. Army, has arranged in alphabetical order, and by States, a catalogue of the members of the American Medical Association, from its formation to 1880, inclusive.

Thinking an analysis of the catalogue might be of interest to the profession, I have spent some time and a great deal of pains in analyzing it in its various phases. In doing so I have given the aggregate number of the members, the number of each State and foreign countries; the number of deaths, both in the aggregate and for each State. Also the number becoming members each year since the commencement.

The whole number of members up to, and including 1880, is 7,294. The number of deaths, 1,314.

The number of members from each State, and also the deaths, are as follows:

Alabama,	97;	deaths,	19.
Arkansas,	48;	"	3.
California,	93;	"	13.
Colorado,	15;	"	1.
Connecticut,	234;	"	83.
Delaware,	39;	"	12.
District of Columbia,	121;	"	31.
Florida,	8;	"	00.
Georgia,	125;	"	19.
Illinois,	448;	"	31.
Indiana,	345;	"	15.
Iowa,	148;	"	12.
Kansas,	19;	"	1.
Kentucky,	256;	"	30.
Louisiana,	70;	"	9.
Maine,	91;	"	23.
Maryland,	235;	"	65.
Massachusetts	590;	"	196.
Michigan	270;	"	26.
Minnesota,	36;	"	6.
Mississippi	56;	"	12.
Missouri,	219;	"	10.
Nebraska,	6;	"	00.
New Hampshire,	107;	"	36.
New Jersey,	209;	"	47.
New York,	1183;	"	183.
North Carolina,	41;	"	2.

Ohio	470;	"	90.
Oregon,	6;	"	1.
Pennsylvania,	773;	"	140.
Rhode Island,	73;	"	22.
South Carolina,	92;	"	28.
Tennessee	151;	"	34.
Texas,	35;	"	3.
Vermont,	105;	"	18.
Virginia,	186;	"	46.
West Virginia,	34;	"	5.
Wisconsin,	80;	"	10.
Territories,	6;	"	00.
U. S. Army	42;	"	12.
U. S. Navy	49;	"	11.

FOREIGNERS.

Central America	1.	France,	3.
China	1.	Peru,	1.
Germany,	1.	Halifax,	1.
Turkey,	1.	Ireland,	1.
Canada,	49.	England,	7.
New Brunswick	2.	Italy,	1.
Brazil,	1.	Austria,	1.

Norway, 1

The number becoming members each year is as follows:

1846	126	1847	189	1848	189
1849	324	1850	218	1851	97
1852	160	1853	286	1854	183
1855	229	1856	214	1857	125
1858	203	1859	170	1860	241
1863	141	1864	261	1865	265
1866	121	1867	211	1868	132
1869	143	1870	196	1871	136
1872	342	1873	271	1874	228
1875	236	1876	307	1877	297
1878	320	1879	146	1880	558

By making comparative examination of the number of deaths in each State, it will be observed that a great difference exists as to the per cent. of mortality. This, I think, mainly depends on the inability of the statistician to learn the history of members who joined many years ago. A great many no doubt changed localities, thus rendering it a difficult matter, in many instances, to trace them. The mortality ranges as low as 4¼ per cent in Indiana, and as high as 36 per cent. in Connecticut. This is certainly too great a difference to be correct.

It is said by statisticians that the average life of a physician is 56 years, but not having the ages of all who died belonging to the Association, I cannot make a satisfactory estimate.

Dr. Toner, in his report on necrology, gives a short biography of 72 members. I find their ages to have averaged 58.3 years.

It will be noticed that no meetings of the Association were held in 1861 and 1862. These exceptions were due to our unfortunate civil war. It will also be observed that there exists a great difference in the number who joined at the various meetings. This was dependent very much on the locality of the meetings. When the Association assembled at places central to a dense population, then large accessions were obtained, and *vice versa*.

A greater number joined last year than ever before, which I think may be accounted for, to some extent, to the increasing popularity of the Association.

The catalogue and biographies above referred to are published in the transactions of the American Medical Association for 1880.

Ord, Kentucky, February 22, 1881.

NEW YORK ACADEMY OF MEDICINE.

At a meeting of the New York Academy of Medicine, held January 20, 1881, the following resolution was adopted:

Resolved, That a committee be appointed by the President to investigate the extent to which leprosy prevails in the United States.

The President appointed as such committee, Drs. H. G. Piffard, F. R. Sturgis, and G. H. Fox.

The committee are desirous of ascertaining the actual number of lepers in this country at the present time, and to that end respectfully request any physician who may know of the existence of a case in his neighborhood to communicate the fact to the chairman of the committee, at No. 10 West 35th Street, New York.

AMERICAN MEDICAL ASSOCIATION.

The Thirty-Second Annual Session will be held in Richmond, Va., on Tuesday, Wednesday, Thursday, and Friday May 3, 4, 5, 6, 1881, commencing on Tuesday at 11 A. M.

"The delegates shall receive their appointment from permanently organized State Medical Societies, and such County and District Medical Societies as are recognized by *representation in their respective State Societies*, and from the Medical Department of the Army and Navy, and the Marine Hospital Service of the United States."

"Each State, County, and District Medical Society entitled to representation shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half that number; *Provided*, however, that the number of delegates for any particular State, territory, county, city, or town shall not exceed the ratio of one in ten of the resident physicians who may have signed the Code of Ethics of the Association."

☞Secretaries of Medical Societies as above designated are earnestly requested to forward, *at once*, lists of their delegates.

Sections.—"The chairman of the several Sections shall prepare and read in the general sessions of the Association, papers on the advances and discoveries of the past year in the branches of science included in their respective Sections. . . . ."—BY-LAWS, Art. II., Sect. 4.

Practice of Medicine, Materia Medica, and Physiology—Dr. Wm. Pepper, 1811 Spruce St., Phila., Pa., Chairman; Dr. T. A. Ashby, Baltimore, Md., Secretary.

Obstetrics and Diseases of Women and Children—Dr. Jas. R. Chadwick, cor. Marlborough and Clarendon Sts., Boston, Mass., Chairman; Dr. Jos. Taber Johnson, Washington, D. C., Secretary.

Surgery and Anatomy—Dr. Hunter McGuire, Richmond, Va., Chairman; Dr. Duncan Eve, Nashville, Tenn., Secretary.

State Medicine—Dr. Jas. T. Reeve, Appleton, Wis., Chairman; Dr. R. G. Jennings, Little Rock, Ark., Secretary.

Ophthalmology, Otology, and Laryngology—Dr. Dudley S. Reynolds, Louisville, Ky., Chairman; Dr. Swan M. Burnett, Washington, D. C., Secretary.

Diseases of Children—Dr. A. Jacobi, 110 W. 34th St., New York, Chairman; Dr. T. M. Rotch, 77 Marlborough St., Boston, Mass., Secretary.

☞The member desiring to read a paper before any Section should forward the paper, or its *title* and *length*, (not to exceed twenty minutes in reading) to the Chairman of the Committee of Arrangements at least one month before the meeting.—*By-Laws.*

Committee of Arrangements.—Dr. F. D. Cunningham, Richmond, Va., Chairman.

Amendment to the By-Laws offered by Dr. J. M. Keller, Ark.: In the election of Officers and the appointment of Committees by this Association and its President, they shall be confined to members and delegates present at the meeting, except in the Committees of Arrangements, Climatology, and Credentials.

W. H. ATKINSON, Permanent Secretary.

PAMPHLETS RECEIVED.

ROCKY MOUNTAIN HEALTH RESORTS. AN ANALYTICAL STUDY OF HIGH ALTITUDES IN RELATION TO THE ARREST OF CHRONIC PULMONARY DISEASE. By Charles Denison, A. M., M. D., Reporter to the International Medical Congress, Philadelphia, 1876, on "the influence of high altitudes upon the progress of Phthisis"; Author of "Reports on Climate and Consumption" to the American Medical Association, etc. Second edition.

PHTHISIS PULMONALIS AND ITS TREATMENT WITH HYPOPHOSPHITES. By Le de Bremon, M. D., University of Paris (France), Knight of the Legion of Honor; Member of the New York County Medical Society, the Neurological Society of New York, and the New York Medico-Legal Society; Late Clinical Assistant to Dr. J. F. Churchill, Paris, etc., etc.

A DEVICE TO FACILITATE THE REMOVAL OF DEEP WIRE SUTURES IN THE OPERATION FOR RUPTURED PERINEUM. By Aug. F. Erich, M. D., Professor of the Diseases of Women, College of Physicians and Surgeons, Baltimore, Md.

RECEIPTED.

[Receipts not acknowledged privately are entered here.]

1880—Drs. R A McIntosh, B H Mathews, T W Spruell.

1881—Drs. J R Wilson. W H Pool, D S Aswell, T L Doster, J H Blain, E A Anderson, J F Pou, W F Jacobs, M Hays, F R Van Eaton, J M Jackson, R J Tolbert, J H Jennings, E Wheeler, T L Quillian, P P Terry, Joseph Underwood, B M Walker, Jno R Mason, W F Clary, J D Jordan, J S Milling, T F Babbitt, T S Parrham, J W Gilbert, A Harris, J M Stansell, C P Sanders, W R Brawner, B T Phipps, W S Glass, H Allison, J B Rumph, J O Sanders, J R Johnson, W P Chapman, Louis Hadden.

SPECIAL NOTICES.

WILLIAM R. WARNER & CO., Philadelphia, are furnishing the Profession with pure chemicals and a great variety of Preparations of most reliable and excellent quality. Their SUGAR-COATED PILLS have an established reputation for solubility and purity. Their PARVULES, in the matter of neatness, beauty, variety and convenience of administration, are unsurpassed, and are among the excellences which characterize the advanced condition of drug manufacture of the present age.

PARKE, DAVIS & CO., Detroit, Mich.—The SUGAR-COATED PILLS of the above extensive establishment we have found to be of excellent quality, and are put up in a neat and elegant style. We may say the same of their CAPSULES and GELATINE-COATED PILLS. These beautiful preparations are most convenient for the practitioner, relieving him of the trouble of preparing his medicines and furnishing him everything to hand in a shape suited to every emergency, and most agreeable and acceptable to the patient.

The advertisement of the now celebrated SADDLE BAG, **ELLIOTT'S PATENT**, appears in this issue of our Journal. It is owned and manufactured by A. A. Mellier, of St. Louis, whose house has been established for 25 years, and is among the leading Wholesale Drug establishments of the country. He obtained the patent right of this BAG four years ago, and showing its merits to the United States government, it was adopted and 300 were immediately ordered, and are now in active use; a very clear evidence of superiority.